We claim:

1. A control entity for a wireless communications system which comprises a plurality of base stations, each base station defining a plurality of beams which each have an amount of resources for supporting communication links with terminals located in the beams, and a relaying equipment, wherein the control entity is arranged to determine if a direct communication link can be supported between a new terminal and a base station using a first beam and, if the direct communication link cannot be supported, to invoke use of the relaying equipment to provide a first communication link between a base station and the relaying equipment using the resources of a second beam and a second communication link between the relaying equipment and the terminal whereby to provide a multi-hop path between the base station and the terminal.

2. A control entity according to claim 1 wherein the first beam and the second beam are defined by the same base station.

3. A control entity according to claim 2 wherein the first beam and the second beam are separated by at least one intermediate beam of the base station.

4. A control entity according to claim 1 wherein the base station defines a plurality of sectors and the beams have a width which is narrower than the width of the sectors.

5. A control entity according to claim 1 which is arranged to adapt the shape of the second beam to serve the relaying equipment.

6. A control entity according to claim 1 which is arranged to determine if the first beam has sufficient resources to support a direct communication link with the new terminal.

7. A control entity according to claim 6 which is arranged to determine if the first beam has sufficient resources to support a direct communication link without reducing quality of communication for existing terminals served by the first beam below a predetermined limit.

8. A control entity according to claim 7 which is arranged to determine an amount of resources required to support the direct communication link between the new terminal and the base station, to determine a reduced amount of resources available to existing terminals served by the first beam if the base station were to accept the new terminal, and a quality of communication resulting from the reduced amount of resources.

9. A control entity according to claim 7 wherein the base station uses equal throughput scheduling (EQT).

10. A control entity according to claim 1 wherein there are a plurality of relaying equipments positioned within the beams and the control entity is further arranged to select a relaying equipment, from a plurality of candidate relaying equipments, to provide the multi-hop path.

11. A control entity according to claim 10 wherein the control entity is arranged to select a relaying equipment on the basis of the quality of the first communication link that the relaying equipment can provide.

12. A control entity according to claim 10 wherein the control entity is arranged to select a relaying equipment on the basis of the quality of the second communication link that the relaying equipment can provide.

13. A control entity according to claim 10 wherein the control entity is arranged to select a relaying equipment on the basis of distance between the relaying equipment and the new terminal.

14. A control entity according to claim 10 wherein the control entity selects a relaying equipment in order to compensate for the shape of the beams.

15. A control entity according to claim 1 wherein the second communication link uses the resources of the first beam.

16. A control entity according to claim 1 wherein the second communication link uses the resources of the second beam.

17. A control entity according to claim 1 wherein the second communication link uses resources which are separate from those allocated to each beam for direct communication with terminals.

18. A control entity according to claim 1 which is part of the base station or a base station controller.

19. A control entity according to claim 1 which is part of the terminals or relaying equipment.

20. A base station for a wireless communications system including a control entity according to claim 1.

21. A base station controller for a wireless communications system including a control entity according to claim 1.

22. A terminal for a wireless communications system including a control entity according to claim 1.

23. A method of establishing a connection between a new terminal and a base station in a wireless communications system, the system comprising a plurality of

base stations, each base station defining a plurality of beams which each have an amount of resources for supporting communication links with terminals located in the beams, and a relaying equipment, the method comprising:

determining if a direct communication link can be supported between the new terminal and the base station using a first beam;

if the direct communication link cannot be supported, invoking use of the relaying equipment to provide a first communication link between a base station and the relaying equipment using the resources of a second beam and a second communication link between the relaying equipment and the terminal whereby to provide a multi-hop path between the base station and the terminal.

24. A method according to claim 23 wherein the first beam and the second beam are defined by the same base station.

25. A method according to claim 24 wherein the first beam and the second beam are separated by at least one intermediate beam of the base station.

26. A method according to claim 23 further comprising adapting the shape of the second beam to serve the relaying equipment.

27. A method according to claim 23 further comprising determining if the first beam has sufficient resources to support a direct communication link with the new terminal.

28. A method according to claim 27 further comprising determining if the first beam has sufficient resources to support a direct communication link without reducing quality of communication for existing terminals served by the first beam below a predetermined limit.

29. A method according to claim 28 further comprising:

determining an amount of resources required to support the direct communication link between the new terminal and the base station;

determining a reduced amount of resources available to existing terminals served by the first beam if the base station were to accept the new terminal; and

determining a quality of communication resulting from the reduced amount of resources.

30. A method according to claim 27 wherein the base station uses equal throughput scheduling (EQT).

31. A method according to claim 23 wherein there are a plurality of relaying equipments positioned within the beams, the method further comprising selecting a relaying equipment, from a plurality of candidate relaying equipments, to provide the multi-hop path.

32. A method according to claim 31 wherein the selecting step selects a relaying equipment on the basis of the quality of the first communication link that the relaying equipment can provide.

33. A method according to claim 31 wherein the selecting step selects a relaying equipment on the basis of the quality of the second communication link that the relaying equipment can provide.

34. A method according to claim 31 wherein the selecting step selects a relaying equipment on the basis of distance between the relaying equipment and the new terminal.

35. A method according to claim 31 wherein the selecting step selects a relaying equipment in order to compensate for the shape of the beams.

36. A method according to claim 23 wherein the second communication link uses the resources of the first beam.

37. A method according to claim 23 wherein the second communication link uses the resources of the second beam.

38. A method according to claim 23 wherein the second communication link uses resources which are separate from those allocated to each beam for direct communication with terminals.

39. A computer program product for use in a wireless communications system comprising a plurality of base stations, each base station defining a plurality of beams which each have an amount of resources for supporting communication links with terminals located in the beams, and a relaying equipment; the computer program product comprising a machine readable medium carrying instructions for causing a control entity to perform the steps of:

determining if a direct communication link can be supported between a new terminal and a base station using a first beam;

if the direct communication link cannot be supported, invoking use of the relaying equipment to provide a first communication link between a base station and the relaying equipment using the resources of a second beam and a second communication link between the relaying equipment and the terminal whereby to provide a multi-hop path between the base station and the terminal.

40. A control entity for a wireless communications system which comprises a plurality of base stations, each base station defining a plurality of beams which each have an amount of resources for supporting communication links with terminals located in the beams, and a relaying equipment, the control entity comprising:

means for determining if a direct communication link can be supported between a new terminal and a base station using a first beam;

means for invoking, if the direct communication link cannot be supported, use of the relaying equipment to provide a first communication link between a base station and the relaying equipment using the resources of a second beam and a second communication link between the relaying equipment and the terminal whereby to provide a multi-hop path between the base station and the terminal.